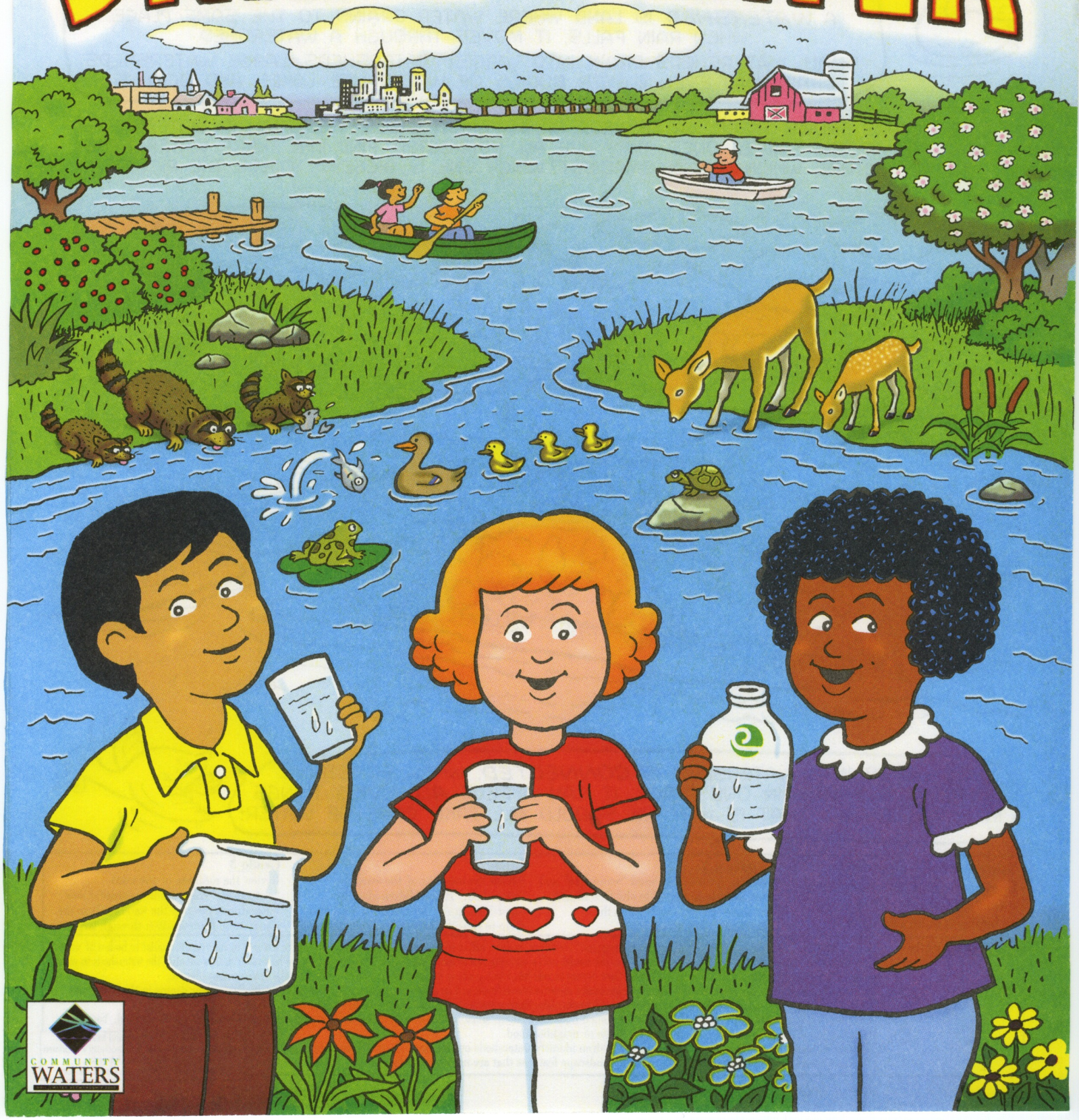
# SHARE THE WATER



COMMUNITY WATERS

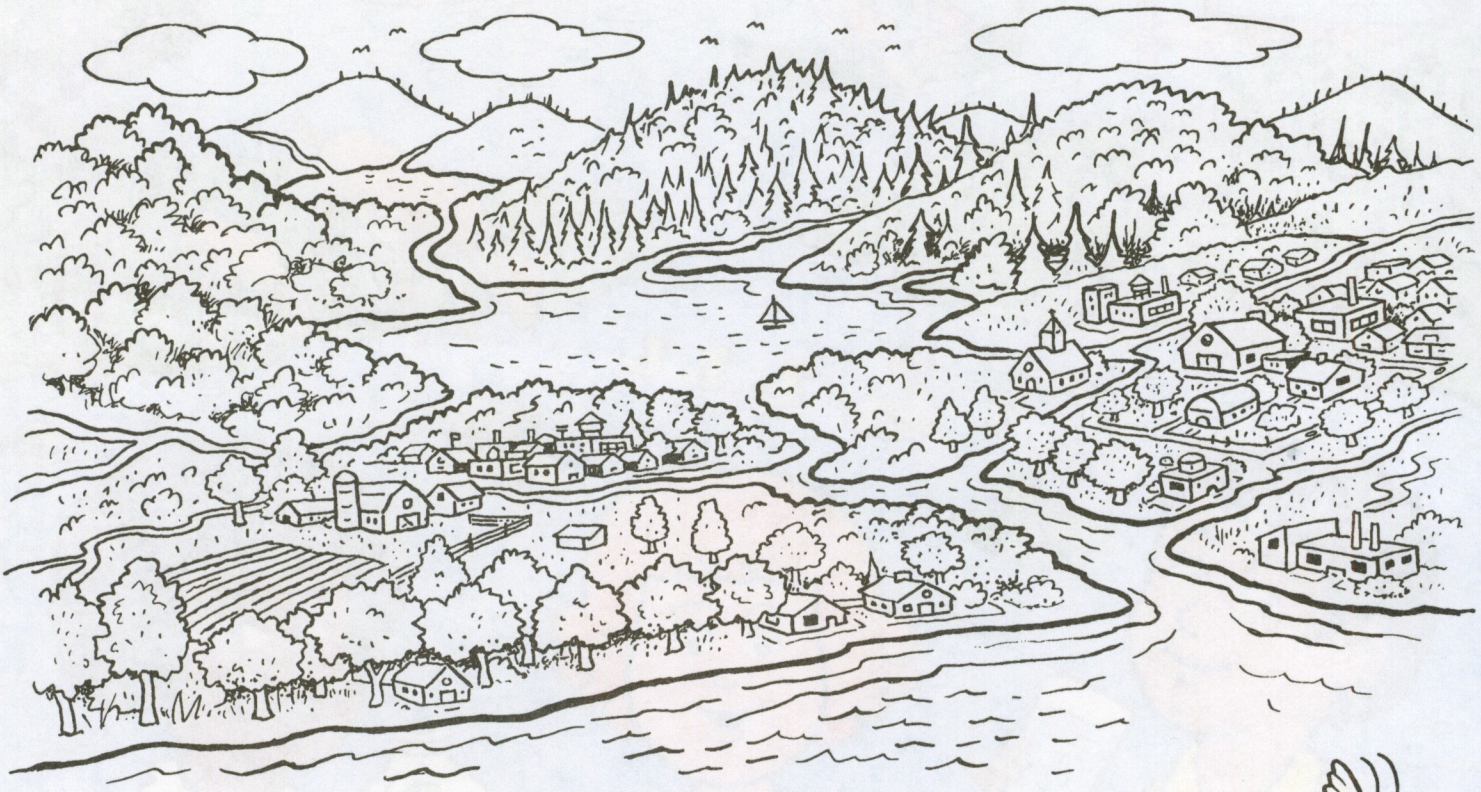
# Where's a Watershed?

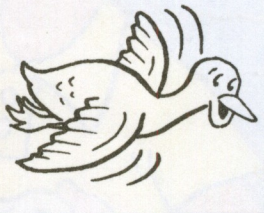
WE ALL SHARE WATER. WE SHARE IT WITH OTHERS IN OUR ***WATERSHED***. PEOPLE AND OTHER LIVING THINGS DEPEND ON THE WATER IN THEIR WATERSHED.

A ***WATERSHED*** IS LAND WHERE WATER DRAINS TO THE SAME PLACE. WHEN RAIN FALLS, IT MOVES THROUGH A WATERSHED.

SMALL WATERSHEDS DRAIN INTO LARGER WATERSHEDS. LARGE WATERSHEDS DRAIN INTO EVEN BIGGER BODIES OF WATER LIKE LAKES AND OCEANS.

THIS PICTURE SHOWS THREE WATERSHEDS OF DIFFERENT SIZES. THE SMALLER WATERSHEDS ARE PART OF THE LARGER ONES. THEY ARE ALL CONNECTED. FIND THE THREE WATERSHEDS IN THIS PICTURE. WHICH ONE IS SMALLEST? WHICH ONE IS BIGGEST? COLOR THE PICTURE.





ALL WATER IN A WATERSHED IS ***CONNECTED***. WHEN SOMETHING HAPPENS TO WATER IN ONE PLACE, IT CAN AFFECT ***ALL*** LIVING THINGS IN A WATERSHED. THAT IS WHY WE SHOULD ALL TAKE CARE OF WATER!

**Suggested Grades** - K-3
**Goal** - Readers will recognize the term "watershed" and identify watersheds in an illustration.

**Grades K-1**
Help children use the word "watershed" and discuss its meaning. Help children identify the three watersheds shown in the illustration.

**Grade 2**
Review the meaning of the word "watershed." Help children identify watersheds in the illustration and prompt them to consider how they are connected.

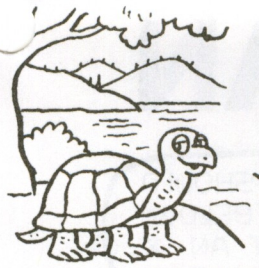
**Grade 3**
Review the meaning of the word "watershed." Have children consider how water drains through the watersheds in the illustration, from smallest through largest.

**Related Activities**

- Build a model of a watershed. Outdoors, or inside in a waterproof container, sculpt a hill or mountain out of soil and rocks. Make features in your model similar to bodies of water, like ponds, lakes and riverbeds. Gently sprinkle water over the model with a watering can or spray bottle. Ask children to observe how water drains. Identify the watersheds in your model; are there more than one? Ask them to consider how factors in real life, like a parking lot, a forest or a city might affect the drainage they observe.
- Look for watersheds in the immediate area. Have students observe the schoolyard or a nearby park. Ask them to consider how water drains in this area. Ask them to identify very small watersheds in the area and to consider larger watersheds into which water drains.
- After their observations, help students draw a watershed map. Have them show bodies of water and draw how water drains through the watershed. You can also ask them to draw a watershed map of their home or neighborhood.
- Examine different scale maps of your area. Have children identify watersheds on the map. Then examine the area in real life. Have them observe and describe water-related landscape features that are not shown on the map.



Written by Scott Deschaine and Mike Benton.
Art by Bob Donovan. Created, produced and printed in the United States of America.



# LINK A DRINK!

WATER MOVES ALL AROUND OUR WORLD. AS IT MOVES, IT CAN CHANGE FORM. WATER CAN BE ***SOLID*** LIKE ICE, ***LIQUID*** LIKE WATER OR ***WATER VAPOR*** LIKE STEAM YOU SEE WHEN YOU COOK.

LOOK AT THE PICTURES BELOW THAT SHOW WATER MOVING THROUGH DIFFERENT PLACES. PICTURE 1 SHOWS WATER VAPOR. PICTURE 7 SHOWS WATER FOR DRINKING. NUMBER THE OTHER PICTURES IN ORDER. THEN DRAW A LINE TO LINK THE PICTURES IN ORDER.

**Rain** falls from clouds.

Water **vapor** rises from trees and lakes.

1

Water vapor forms **clouds**.

People pump water to homes.

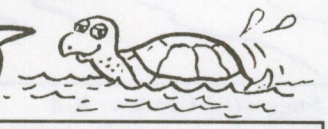
Rain soaks into the ground. Some runs into **streams** and **rivers**.

Clean water is good to drink!

7

Streams and rivers drain into **lakes** and **reservoirs**.

WATCH OUT FOR WATER WHEREVER YOU GO.
HELP MAKE SURE WE ***ALL*** HAVE CLEAN WATER TO DRINK!



**Suggested Grades** - 1-3

**Goal**

Readers number and link pictures of water into a sequence.

**Grades K-1**

Help children read the captions and identify the water in each picture. Help them construct the logical sequence and complete the numbers.

**Grade 2**

Help children construct the logical sequence of water movement from vapor to drinking water.

**Grade 3**

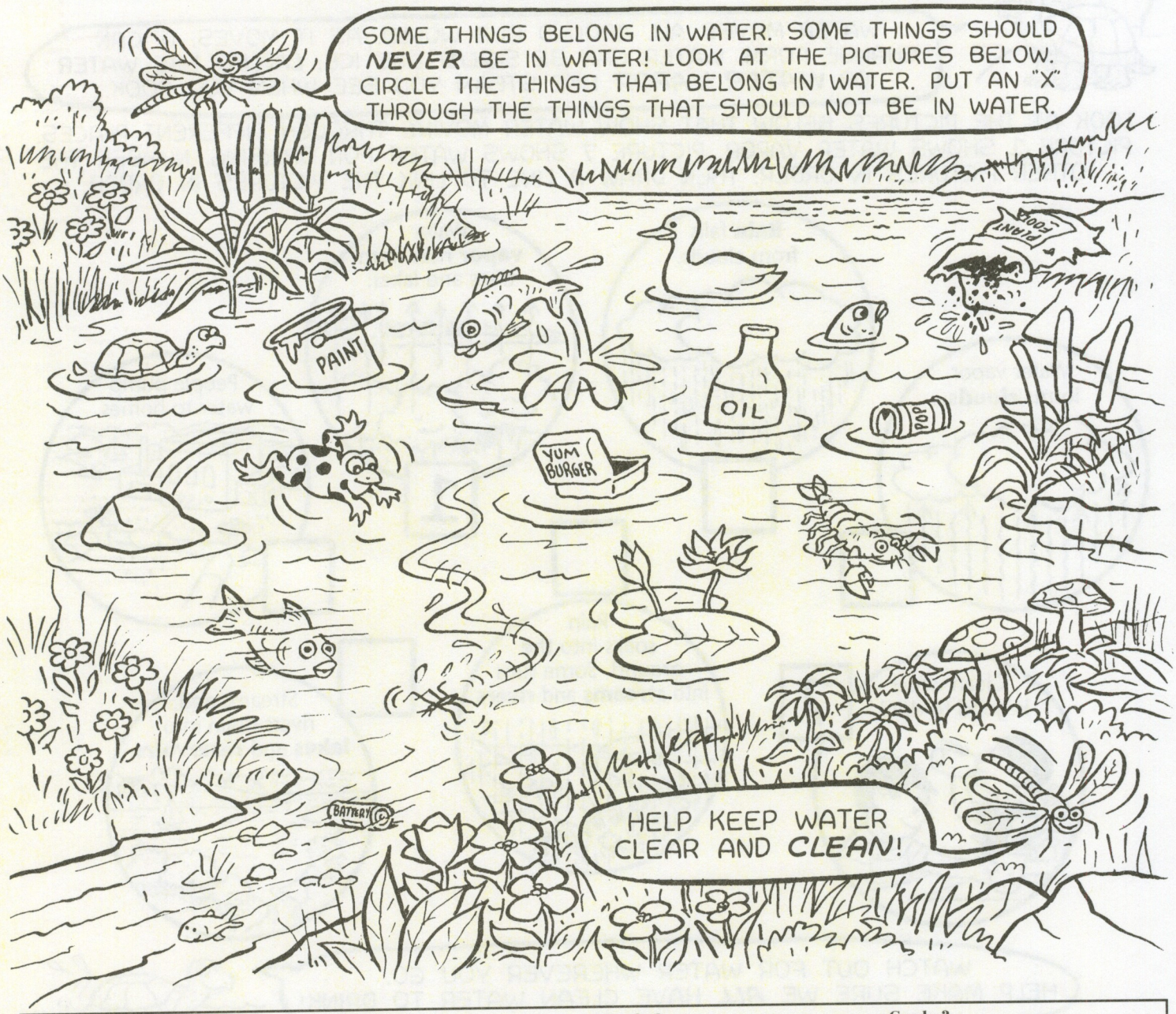
Have children construct an alternate sequence for drinking water obtained from wells. Help them follow water as it moves from rain to surface water, ground water, aquifers and wells.

**Related Activities**

- Discuss sources of drinking water with students. Have students ask parents about their source of drinking water at home. Discuss their findings in class.
- Have children draw different forms of water (ice, liquid water, water vapor/clouds). Ask them where and when they might observe the different forms of water in their own surroundings.
- Use some simple displays to show how water changes as it changes state. To show how water changes from liquid to solid, fill an ice cube tray or cup with water and mark the level of the water on the side of the container. Freeze the water. Then have students observe where the top of the ice is in relation to the mark. Remove the ice and place it in a larger container of liquid water. Have students observe how the ice floats. Explain that when water expands during freezing it becomes less dense and this is why ice floats. Point out how this special quality of water allows life in liquid water to survive under ice during freezing weather. To show how water changes from liquid to gas, boil water and have students observe how water changes to steam. Have them observe how much more space steam fills than water. Discuss how water is the only substance on our planet that naturally exists as solid, liquid and gas.

Answer
(clockwise from #1)
1, 6, 5, 4, 7, 2, 3

# Clear, Cool and CLEAN




**Suggested Grades** - K-3

**Goal** - Readers will discriminate between items that belong in fresh water and items that do not.

**Grades K-1**
Help children name the items shown. Help them determine whether each item belongs in water.

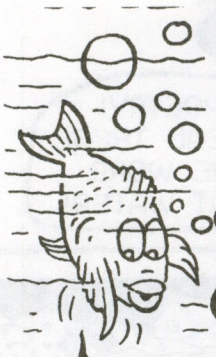
**Grade 2**
Discuss which items belong in water and which don't. Discuss how the items that don't belong can adversely affect water supplies.

**Grade 3**
Ask students to consider how items that don't belong in water can adversely affect water. Discuss other sources of pollution and their effects.

**Related Activities**

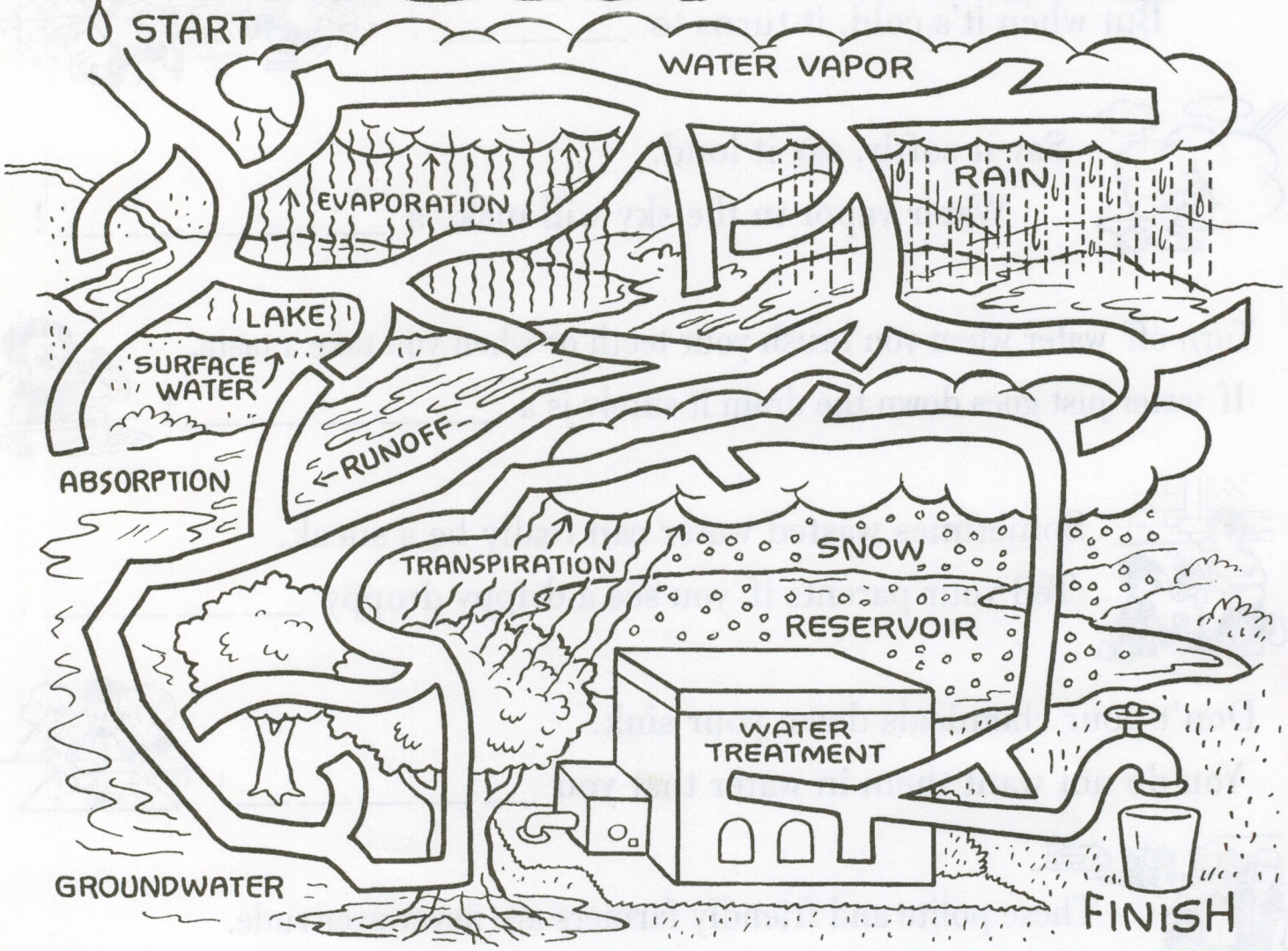
- Show children how water can dissolve and carry pollutants, sometimes invisibly. Select common household substances like salt, corn oil and mint extract. Using clear glass containers, show how water dissolves salt and how mint extract mixes with it. Ask children to consider how pollutants in water can be moved far from their source when they are dissolved in water. Dilute the water and show how the salt or mint is still present. Show how corn oil does not mix but floats on the surface of the water. Discuss how substances like this can affect water life. Discuss the need to keep pollutants away from water.
- Discuss how some items should not be thrown into regular garbage because water can dissolve them and spread pollution. Discuss how most households have hazardous wastes like batteries, paint cans, motor oil and pesticides. Check in your community to learn the proper way to dispose of these items. Then have children ask parents to collect hazardous waste around their home and dispose of it accordingly.
- Play "Hop in the Pond." Make a stack of cards, naming items that should and shouldn't be in water. Add some fanciful items, like "old sneaker" or "biggest frog in the county." Children stand to form a circle that is the "pond." Place the cards face down in the center. Children take turns hopping in the pond and turning over a card. If their card names something that belongs in the pond, they "swim" around inside the pond and return to their place. If their card names something that shouldn't be in the pond, they hop out of the pond, run around the outside of the pond and return to their place.

# Water Way



*WATER GETS AROUND*! IT MOVES IN STREAMS, RIVERS, LAKES, SOIL AND AIR. IT EVEN MOVES THROUGH *ME AND YOU*!

HELP THIS DROP OF WATER FIND ITS WAY THROUGH THIS MAZE TO THE GLASS OF CLEAN WATER. TAKE CARE OF WATER WHEREVER YOU FIND IT. THE DROP YOU SEE *TODAY* MAY END UP IN YOUR GLASS *TOMORROW*!




**Suggested Grades** - K-3

**Goal** - Readers complete a maze as they observe different forms and states of water.

**Grade 1**
Point out the beginning and end of the maze. Help children move through the maze. Name and describe water in the different areas.

**Grade 2**
Help students name the different areas through which water passes in the maze. Review and define the terms for different forms and states of water.

**Grade 3**
Have students name and describe the forms of water shown. Discuss how water changes from place to place. Ask them to suggest other forms that water could take.

**Related Activities**

- Have students write or tell a story about the travels of a drop of water.
- Ask students to illustrate their story of a drop of water's travels or have them draw their own maze based on their story.
- Show students how water moves differently through different types of soil. Get three watertight containers with open tops (for example, milk cartons with the tops removed). Add equal volumes of different types of soil to the containers (don't pack the soil down). If you can, use sandy soil (or just sand), soil with lots of humus and clay. Measure equal amounts of water into three separate cups. Have students slowly pour the water from one cup onto one type of soil. Observe how water is absorbed by the soil. Stop pouring when water is visible on top of the soil. Note how much water is left in the cup. Repeat for each type of soil. Compare how much water each type of soil can hold. Discuss how different types of soil in nature affect how water moves through a watershed. Observe soils in nearby areas and consider how they affect water movement. Observe how different types of plants grow on different soils, and consider how water availability in soil affects plant life.

# WATER RHYMES

WATER IS ***AMAZING***! IT INSPIRES ME TO WRITE POETRY! BUT I NEED YOUR HELP TO FINISH THESE RHYMES. READ THESE LINES ABOUT WATER. FILL IN EACH BLANK WITH THE WORD THAT RHYMES. YOU'LL BE A POET ***AND*** LEARN ABOUT WATER!

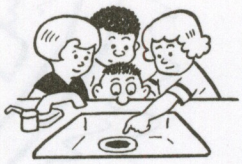
When water is warm it feels quite nice!
But when it's cold, it turns to ___ ___ ___ .

Say it softly, say it loud.
Water vapor in the sky will make a ___ ___ ___ ___ ___ !

Turn off water when you brush your teeth or when you take a taste.
If water just goes down the drain it surely is a ___ ___ ___ ___ ___ !

Sometimes wasted water can really be a sneak.
Tell your parents if you see a drippy droppy ___ ___ ___ ___ .

Don't pour chemicals down your sink.
You do not want them in water that you ___ ___ ___ ___ ___ !



These polite and friendly farmers are never ever rude.
They wisely use fresh water so they can grow our ___ ___ ___ ___ .

**Suggested Grades** - 1-3
**Goal** - Students complete rhymes that describe important basic facts about water.

**Grades K-1**
Read the rhymes with students. Allow them to verbally finish the rhymes. Prompt them if necessary.

**Grade 2**
Have students read and complete the rhymes. Have them read the completed rhymes aloud.

**Grade 3**
Have students read and complete the rhymes. Have them read completed rhymes aloud. Ask them to compose an original "water rhyme" themselves.

**Related Activities**

- Ask students to write a song about water to the tune of a popular children's song. Help younger students with water facts and rhyming.
- Review important common ways to conserve water. Discuss the following ways that individuals can save water: Turn water off when brushing teeth, take quick showers instead of baths, keep a water bottle in the refrigerator to avoid running tap water to make it cold, ask parents to fix leaks and to install aerators on faucets.
- Have students draw a picture of themselves and their family practicing a water-saving technique. Ask them to take it home and discuss saving water with their family. Point out that when families save water they save money, too.

**Answers**
ice, cloud, waste, leak, drink, food

# MAKE WATER COUNT

WE ALL USE WATER EVERY DAY. LOOK AT THESE WAYS THAT PEOPLE USE WATER. FOR ONE DAY, KEEP TRACK OF HOW MANY TIMES YOU USE WATER IN THESE WAYS. EACH TIME YOU DO ONE OF THESE THINGS, MAKE A CHECK MARK IN A BOX NEXT TO THE PICTURE. AT THE END OF THE DAY, WRITE HOW MANY TIMES YOU USED WATER EACH WAY IN THE SPACE MARKED "TOTAL."

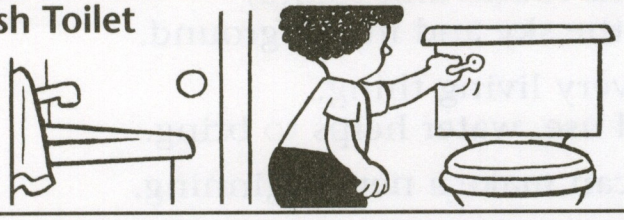
**Wash Hands**

Total _____

**Drink Water**

Total _____

**Flush Toilet**



Total _____

**Take a Shower or Bath**

Total _____


_____

_____

_____

_____

**Suggested Grades** - K-3

**Goal**

Students track their daily water usage and observe their need for fresh water.

**Grades K-1**

Help children keep track of their water use and mark the check boxes. After one day, help them review their water use.

**Grade 2**

Remind children to keep track of their water use. After one day, discuss their use of water and their need for fresh water.

**Grade 3**

Based on their one day checklist and using these values, have students calculate their water use for a day, a week and a month.

1 hand washing = 1 gallon
1 drink of water = 1/8 gallon
1 toilet flush = 3 gallons
1 shower = 20 gallons
1 bath = 35 gallons

**Related Activities**

- Have students cut out pictures from old magazines of people using water. On a large piece of paper, have them paste the pictures to make a collage. Ask students in Grades 2-3 to write captions for the pictures describing how water is used.
- Ask students to watch for other uses of water in their community during a day or a week. Have them relate their observations in class. Help them name general categories of water use in their community (safety, cleaning, agriculture, industry, recreation, etc.)
- Help students make a "Water Use Map" of their home, school or community. Have them label areas of water use based on their observations. (Younger students will need help with mapping and labelling).
- Point out to students how easily available clean water is a relatively recent development. Discuss how people at different times in history had to perform daily functions without available running water. Have students consider how they would perform routine tasks that use water if water supplies were severely reduced.

# The Water Wheel

This whole great world spins round and round,
With water in the seas, in the sky and in the ground.

Water helps bring life to every living thing.
All the things we need and use, water helps to bring.

Every day, each one of us can make a new beginning.

Care for water,
Share the water,

## Keep the wheel spinning!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